



Health Care Delivery in China

Ashwini Kalantri

- 22 Provinces
- 5 Autonomous regions
- 4 Municipalities
- 2 Special administrative regions (SARs)
- 1 Claimed province



Provincial level > County level > Township level > Village level

The Sick Man of Asia

- 1.35 Billion (~50% Rural)
- Life expectancy: 75 years (Male: 74 yr; Female: 77yr)
- Infant Mortality Rate: 12/1000 live births
- Maternal Mortality Ratio: 32/100000 live births
- Under 5 Mortality Rate: 14/1000 live births
- Expenditure on Health: 5.4% of GDP (56% Public)

3

LE - 66

IMR - 44

MMR - 190

U5MR - 56

4% of GDP (1.3% public/ 32%)

History

- **1912:** Republic China
- **1914:** Perking Union Medical College
- **1927:** Dept of Public Health attached to PUMC
- **1927:** Public Health Dept. in Ministry
- **1950:** Adoption of a 3-tier structure for Health
- **1951:** Health insurance for Central Govt.
- Employees Western Medical schools established
- **1953:** First Five year plan
- **1957:** Secondary Medical Schools established
- **1965:** Criticism of existing system as “Elite oriented”

History

- **1966:** Cultural Revolution
- **1965:** Recognition of Chinese Medicine
- China Medical education reduced to 3 Years
- **1972:** One child policy
- **1973:** Bare-Foot Doctors
- **1975:** Geographical redistribution of Health care facilities
- Med. Education restored to 6 years
- **1976:** Free market Policy

National Health Congress 1950

- Medicine should serve the workers, peasants and soldiers
- Preventive medicine should be emphasised over curative services
- Traditional medicinal practices should be integrated with western medicine
- Health related work should be combined with mass movements

Rural Co-operative Medical System (CMS)



- Three-tier system for rural healthcare access
 - Barefoot Doctors
 - Township health centers
 - County hospitals

7

- Started in 1949
- Coverage: 90% of the rural population by 1960, after the cultural revolution, dropped to 4% in 1984
- Some converted to village doctors
- Efforts were not able to revive them
- **Mutually reliant and supported each other for provision of preventive and curative health care**

Rural Co-operative Medical System (CMS)

- **Funding:**

1. Individual income contribution
2. Village Collective Welfare Fund
3. Subsidies from higher government

- **Communes** - true egalitarian society

- Low individual income but stellar growth in health
- Epidemic Prevention Station (EPS) - Preventive care (closely knit with the curative services)

8

- life expectancy 2x; and decreased the prevalence of certain diseases - Malaria etc
- Households no longer burdened by the health care costs

changes

9

Cultural revolution in 1966-1970s

Collective farming ended —> breakdown of the collectively financed health services

Increased health institutions —> decreased health outcome due to inequities in affordability, accessibility and availability

Hospitals/clinics has to earn money as state finances lowered

Privatisation

Government spending on public health halved.

User fees: OOP expenditure increased 60% in 1960; 37% today

Recent Priority Implementation Programs of the Health Care System Reform **12th five year plan**

- Accelerate the development of basic health security system
- Establish essential medicines system
- Perfect grassroots healthcare system
- Promote equitable basic health services
- Advance pilot projects in public hospital reform

New Rural Cooperative Medical Care System (NRCMCS)

- Government, Collectives and Individuals
 - 20¥ (Rs 200) - User contribution
 - 80¥ (Rs 800) - Government contribution
- 95 billion ¥ was collected in 2009
- 92 billion ¥ was paid out as reimbursement
- 2009 - about 833 million rural residents had joined (94%)

11

NRCMCS - 2003

Voluntary system

Health administration

- The Ministry of Health
- State Administration of Traditional Chinese Medicine (TCM)
- The State Food and Drug Administration, PRC
- Other ministries

12

- **The Ministry of Health:** designing national health law, planning and budgeting resource allocation, supervising healthcare services and health professionals.
- **State Administration of Traditional Chinese Medicine:** subordinated to Ministry of Health, undertaking the responsibility of health service management of Traditional Chinese Medicine.
- **The State Food and Drug Administration** PRC, part of the Ministry of Health from 2008, undertakes the responsibility of supervising the industries of food and drugs.
- **Other ministries** also play vital roles in the development of healthcare services, such as **Ministry of Civil Affairs of PRC and National Population and Family Planning Commission of PRC.**

Provider Network

- Non-profit health organisations as its mainstay
- Public hospitals as the driving force
- For-profit health organisations and non-public hospitals as partners and backup

Service Delivery

City, Provincial and National	General Hospital
	City Hospital
County	General Hospital
	Maternal and Child care service centre
	Sanitation and anti-epidemic station
Town	Community medical care center
Village	Medical care center

14

1088 People per hospital

69 beds per 10,000 people

Service Delivery

- **Community health facilities:** prevention, medical care, health care, recurring services, health education and family planning.
- **Township health centres and village clinics:** common, prevalent diseases and primary public health services.
- **County-level hospitals:** acute care and basic health service and technical support for township- and country-level clinics.
- **Township-level clinics:** diagnosis and treatment of common diseases and technical and managerial support for country-level clinics.

Service Delivery

- **Community-level health service facilities:** curative and rehabilitative services
- **City hospitals:** sustainable development of community-level health facilities by providing technical support and staff training.
- **Large general hospitals:** treatment emergent, serious and complicated diseases, along with medical education and scientific research.
- **Traditional Chinese Medicine**

16

Most private and public hospitals have Traditional Chinese Medicine services/departments

Health Workers

- Health professionals
 - Doctors
 - Licensed doctors
 - Licensed assistant doctors
 - Nurses
 - Technicians
- Other technicians
- Management staff

17

- **Health professionals** include doctors, nurses, pharmacists, laboratory technicians, clinical radiologists, and other technical staff with advanced education.
- **Doctors** are those who pass a licensing examination and are registered at a county or higher-level health authority as either licensed doctors or licensed assistant doctors.
- **Licensed doctors** are medical graduates with a bachelor's or higher degree, and a year's internship supervised by licensed doctors at a clinic or preventive or health-care institution.
- **Licensed assistant doctors** are medical graduates of 3-year tertiary medical education programmes with an associate degree, or secondary education programmes with a diploma (2 years' medical education after high school), followed by 1 year of internship supervised by licensed doctors at a clinic or preventive or health-care institution.
- **Nurses** are those who have obtained nursing certification with an associate degree (3 years' tertiary nursing education) or higher, or graduates from secondary education programmes with a diploma (2 years' nursing education after high school) and recommended by a health authority at provincial level or above. No examination is required.
- **Technicians** are professionals who have undertaken specialised studies, and include pharmacists, laboratory technicians, radiology technicians, and other technical staff .
- **Other technicians**, not classified as professionals, are graduates from secondary technical schools and higher education schools in non-medical

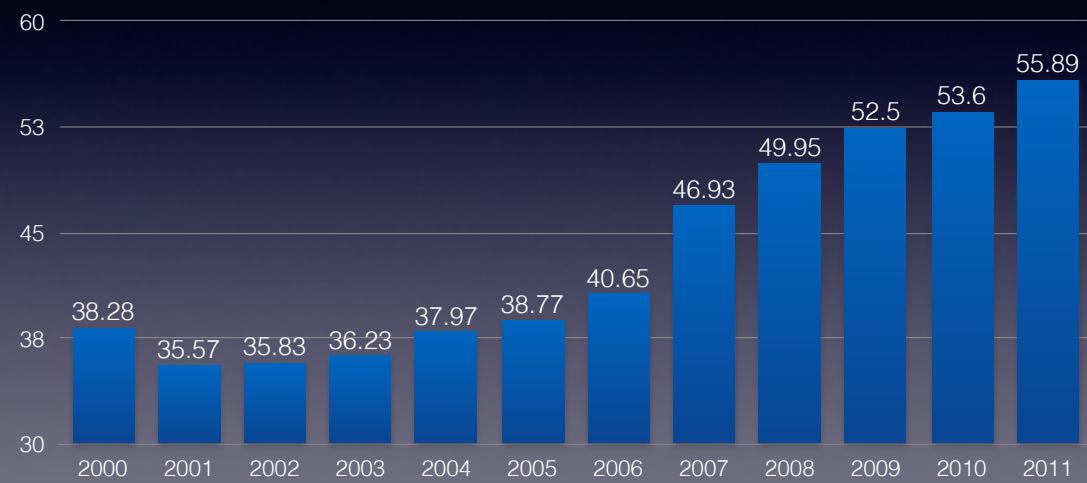
Health Financing

- Public financing before the economic reforms - centrally planned economic system
- After 1978, as the government's health input declined and the social health security scheme weakened (OOP in 2001 - 60%)
- Health financing now includes tax-based government health budget, social health insurance, OOP, private medical insurance and other health expenditure.
- **2011:** Government: **55.89%**
- **OOP:** **34.77%** during 2011

18

Public financing dominated health financing after the establishment of New China and before economic reform, during which a centrally planned economic system was implemented.

Public Health Expenditure

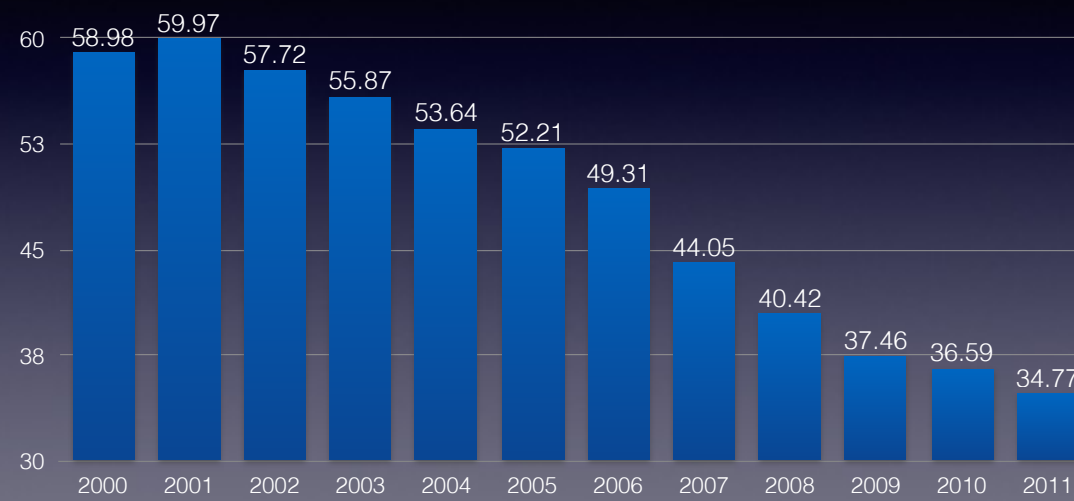


19

GDP 5.4%

Public - 3%

OOP Expenditure



Equity: Allocation

- Professional health workers/1000 population
 - Developed eastern region: **5.49**
 - Under-developed western region: **4.00**
- The number of beds per 1000 people
 - Shanghai: **7.55**
 - Guizhouan: **2.77**

Equity: Utilisation

- 20% poorest residents utilized **10.9%** of inpatient services
- 20% richest residents utilized **35.83%** of inpatient services

Equity: Health Outcome

- Maternal mortality (per 100,000 live births)
 - Tibet: **180.7**
 - Jiangsu province: **1.2**

Universal Health

Social health insurance schemes

- Urban Employees' Basic Medical Insurance (UEBMI)
- Urban Residents' Basic Medical Insurance (URBMI)
- New Rural Cooperative Medical Scheme (NRCMS)
- 2011: 1.295 billion (>95%) insured

24

- **UEBMI** in 1998 - covers all urban employers.
- **URBMI** covers other urban residents who are not formally employed
- Managed by **Ministry of Human Resource and Social Security**
- **NRCMS** mainly covers rural residents, and the Urban and Rural Medical Assistance System covers the population who are economically strained. - managed by **Ministry of Health**

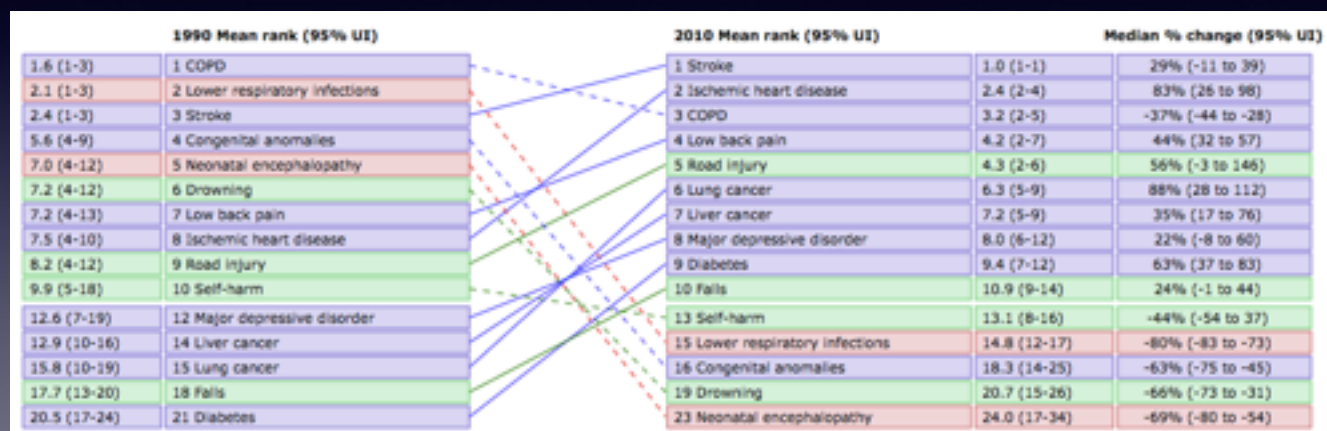
Universal Health

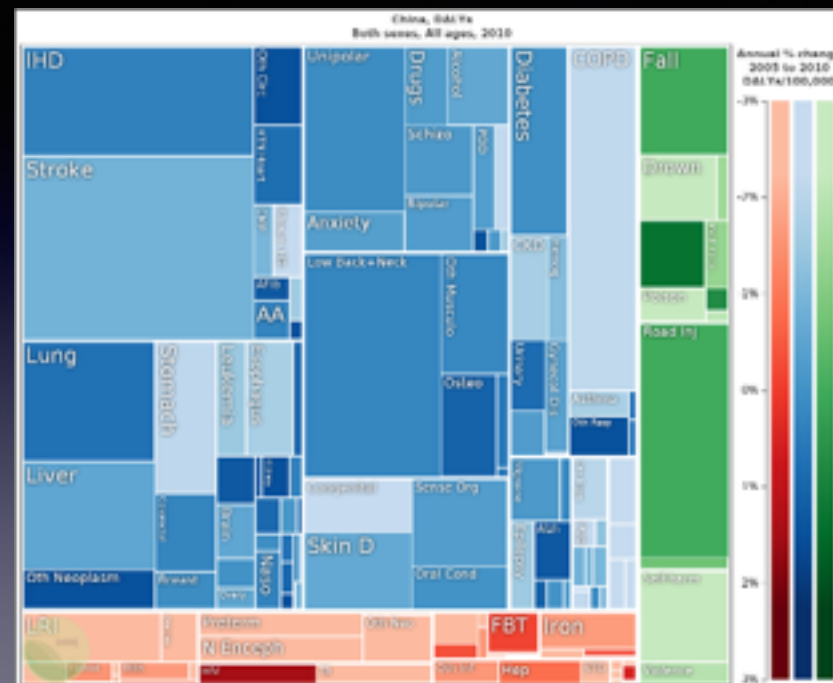
- Health care utilization increased especially for the poor
- Maternal and child immunization programs - improved
- Infectious diseases have been well controlled
- Intervention programs for controlling non-communicable diseases have been strengthened.
- Proportion of out-of-pocket in total health expenditures has declined.

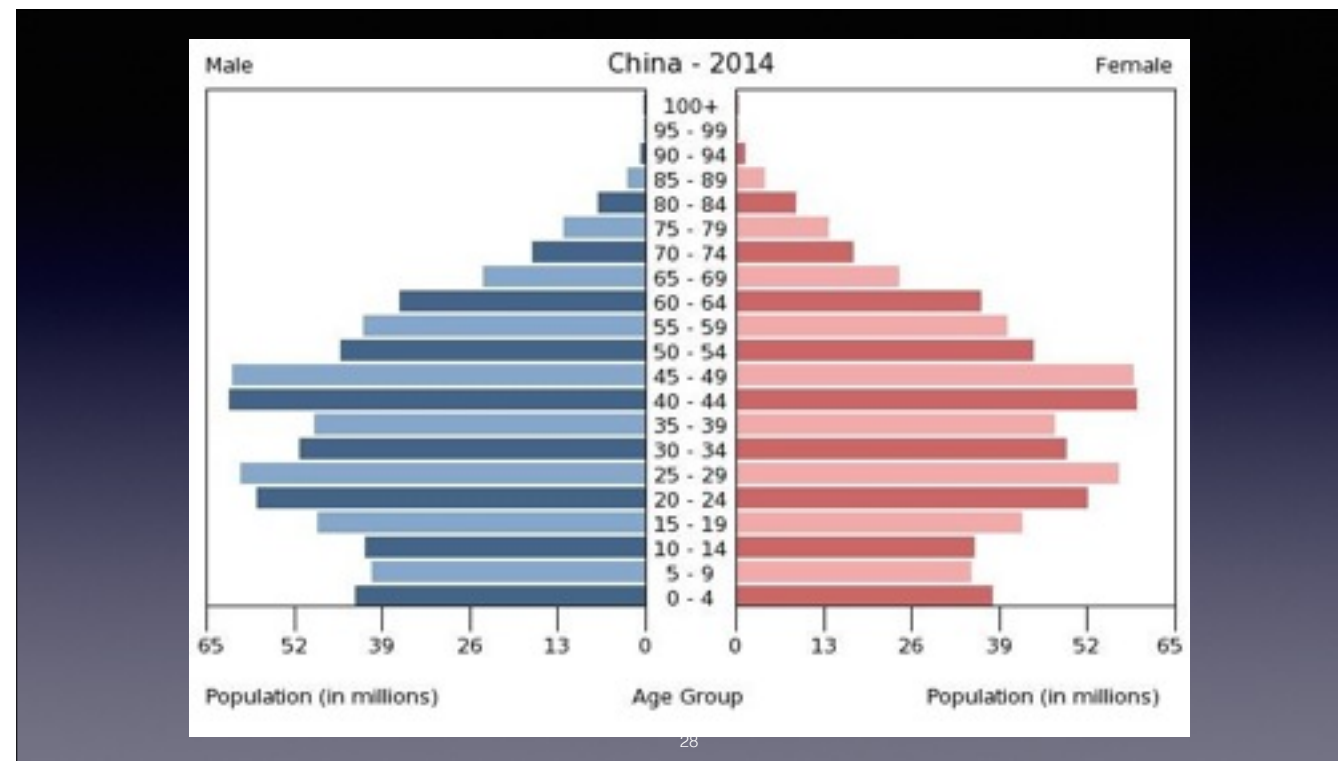
25

Line Ministries at National Level —> Provincial Governments (allocate and asses responsibilities) —> local governments

Burden of Disease







One child policy - 1979

Relaxed in 2013: Parent who is a only child can have 2 children

References

- Oxford Textbook of Public Health, 5th Ed
- Jens Leth Hougaard, Lars Peter Osterdal and Yi Yu. The Chinese Health Care System: Structure, Problems and Challenges Department of Economics, University of Copenhagen, January 2008
- Daqing Zhang, Paul U Unschuld. China's barefoot doctor: past, present, and future. The Lancet. Vol 372. November 29, 2008
- Zhe Dong, Michael R Phillips. Evolution of China's health-care system. The Lancet. Vol 372 November 15, 2008
- Health Service Delivery Profile: China 2012. WHO and China National Health Development Research Centre
- Institute for Health Metrics and Evaluation. <http://www.healthdata.org> (Assessed on 5 Aug 2014)
- Rapid health transition in China, 1990—2010: findings from the Global Burden of Disease Study 2010. The Lancet. 381(9882) 1987 - 2015, 8 June 2013
- Statistical Yearbook of the Republic of China 2012